

PATENT

2185-0532P

IN THE U.S. PATENT AND TRADEMARK OFFICE

In re application of

Before the Board of Appeals

HIGASHI, Kenichi et al.

Appeal No.:

Appl. No.: 09/842,248

Group:

1773

Filed:

April 26, 2001 Examiner: NAKARANI, D.S.

Conf.:

7514

For:

LAMINATED FILM AND STRUCTURE COMPRISING

SAME

SUBSTITUTE APPEAL BRIEF TRANSMITTAL FORM

MS APPEAL BRIEF - PATENTS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 November 17, 2005

Sir:

Transmitted	d h	nerewith	is	s an	App	eal	Brief	on	behalf	of	the
Appellants	in	connecti	on	with	the	abov	e-ident	ifie	d applic	atio	n.

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A Notice of Appeal was filed on October 25, 2004.

Applicant	claims	small	entity	status	in	accordance	with	37
C.F.R. § 1	L.27							

The fee has been calculated as shown below:

Extension	of	time	fee	pursuant	to	37	C.F.R.	SS	1.17	and
1.136(a) -	- \$0	.00.								

Fee for filing an Appeal Brief - \$500.00 (large entity) previously paid on December 24, 2004. No Fee DUE.

	Check(s)	in	the	amount	of	\$500.00	is(are)	attached.
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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment(s)

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LAMINATED FILM AND STRUCTURE COMPRISING SAME

SUBSTITUTE APPEAL BRIEF UNDER 37 CFR §41.37

Pursuant to the Notification of Non-Compliant Appeal Brief that was mailed on October 18, 2005, Appellants submit the following Appeal Brief in connection with the Notice of Appeal filed on October 25, 2004 in the above-identified application.

(i) Real Party in Interest

The real party in interest is Sumitomo Chemical Co., Ltd. as evidenced by the assignment recorded at reel #011754 and frame #0891.

(ii) Related Appeals and Interferences

There are no related appeals or interferences associated with this application.

(iii) Status of Claims

Claims 1-19 are currently pending and finally rejected as of the Final Office Action mailed April 26, 2004. The rejection of claims 1-19 is being appealed herein.

(iv) Status of Amendments

All amendments to the claims have been entered as of the Final Office Action dated April 26, 2004. There are no outstanding amendments.

(v) Summary of Claimed Subject Matter

The present invention is directed to a laminated film comprising: (i) a resin layer (A) containing an acrylic resin, and (ii) a resin layer (B) containing a resin composition, which composition comprises: (a) 10 to 98% by weight of a propylene polymer, (b) 1 to 60% by weight of an inorganic filler, and (c) 1 to 60% by weight of a thermoplastic elastomer, provided that the sum of the components (a), (b) and (c) is 100% by weight. (Claim 1; page 3, line 20 to page 4, line 5.) The present invention is also directed to a structure comprising the laminated film and a substrate containing a polyolefin resin and the process for making the structure. (Claims 6 and 8; page 4, lines 6-21.) The present invention is also directed to car exterior parts, interior parts and household electric appliance

parts composed of the claimed structure comprising the laminated film and a substrate. (Claims 9 and 10; page 4, lines 22-24.)

The claims on appeal stand and fall together.

(vi) Grounds of Rejection to be Reviewed on Appeal

Claims 1-19 stand rejected under 35 USC § 103(a) over U.S. Patent 5,725,712 to Spain et al. (hereinafter "Spain") in view of U.S. Patent 5,829,804 to Saeki et al. (hereinafter "Saeki").

(vii) Argument

A. NO PRIMA FACIE CASE OF OBVIOUSNESS

The Examiner has failed to establish a prima facie case of obviousness by failing to show that the cited references when combined teach or suggest all of the elements of the present inventions of claims 1-19. The Examiner has also failed to establish that one of ordinary skill in the art would be motivated to combine the cited references to arrive at the present invention.

Three criteria must be met to make out a prima facie case of obviousness.

(a) There must be some suggestion or motivation, either in the references themselves or in the knowledge generally

available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

- (b) There must be a reasonable expectation of success.
- (c) The prior art reference (or references when combined) must teach or suggest all of the claim limitations.

See MPEP §2142 and *In re Vaeck*, 20 USPQ2d 1438 (Fed. Cir. 1991).

Appellants submit that the Examiner has failed to meet all three criteria to establish a *prima facie* case of obviousness.

The Examiner attempts to establish a prima facie case of obviousness in the Office Action dated October 28, 2002 in paragraph 4, arguing that Spain discloses a laminate structure comprising a carrier film such as polyester (col. 23, lines 49-50) coated with an acrylic clear coat. An acrylic colored paint is applied over the acrylic clear coat and a chlorinated polypropylene size coat is applied over the colored paint coat forming a laminate, which is laminated onto a thermoplastic polypropylene substrate. The Examiner states that the substrate in Spain may contain filler. The Examiner states that Spain discloses steps similar to those claimed and that the article in Spain is directed to a car part or other articles. The Examiner acknowledges that Spain fails to disclose a polypropylene substrate containing filler and thermoplastic elastomer.

The Examiner relies on Saeki for allegedly disclosing a resin composition comprising propylene polymer (100 parts by

weight), ethylene-propylene copolymer rubber (46 parts by weight), and talc (7.7 parts by weight) for making car parts, such as bumpers, which can be painted.

The Examiner argues that it would have been prima facie obvious to one having ordinary skill in the art at the time the invention was made to combine the composition of Spain and the resin composition and substrate taught by Saeki to make the present invention, since the resin composition in Saeki, used as a size coat, is good for adhering paint.

1. No Motivation to Combine

Appellants submit that there is no objective teaching within Spain or Saeki or in the general body of knowledge within the field of art that would motivate one of ordinary skill in the art to combine the disclosure in Spain with the disclosure in Saeki to arrive at the present invention.

Spain discloses, in Figure 4, a laminate having a carrier sheet, a clear coat, a color coat, and a size coat. The color coat is made of a thermoplastic synthetic resinous coating composition containing pigment. The clear coat is a transparent or substantially transparent thermoplastic synthetic resinous coating composition. The acrylic resin component in the clear coat can be a polymethyl methacrylate or a polyethyl methacrylate resin or a mixture of the two and other co-

monomers. The size coat is made of chlorinated polyolefin thermoplastic. The carrier is preferably a polyester casting film. The laminate in Figure 4 in Spain is transferred to a thermoformable backing sheet, which is a semirigid, self-supporting, thin, flat sheet of a synthetic resinous material.

Comparing the above elements in Spain to the elements of the present invention, Appellants submit that Spain fails to disclose a film having a layer containing inorganic filler, propylene polymer, and thermoplastic elastomer as is described in resin layer (B) in claim 1. The deficiencies in Spain are acknowledged by the Examiner in the Office Action dated October 28, 2002. The Examiner admits that Spain fails to teach polypropylene substrate containing filler and thermoplastic elastomer.

Saeki is relied on by the Examiner to allegedly compensate for the deficiencies in Spain. The Examiner alleges that Saeki discloses the resin layer (B) of the present invention, which comprises propylene polymer, inorganic filler, and thermoplastic elastomer. Appellants submit that Saeki discloses a resin composition comprising (A) a propylene-ethylene block copolymer, (B) a propylene homopolymer, (C) a specific ethylene-propylene copolymer rubber and/or an ethylene-propylene-diene copolymer rubber, (D) talc, and (E) a specific polyhydroxy polyolefin. This resinous layer is not identical or equivalent to resin

layer (B) recited in the present claims. The composition in Saeki uses component (E) polyhydroxy polyolefin to improve the paintability of a car bumper. The present invention is able to provide an excellent laminate film without layer (B) containing polyhydroxy polyolefin as a component. Appellants submit that the missing element of the present invention, resin layer (B), is not fully taught in Saeki.

Appellants submit that Spain does not disclose advantage to be obtained from combining the resin composition of Spain with that of Saeki. The object of both inventions is to provide excellent paintability and durability and appearance. However, Spain relates to dry paint transfer techniques and Saeki relates to traditional paint techniques. The laminate in Spain is prepared by dry paint transfer-laminating techniques. The resulting laminate is thermoformed into a complex threedimensional shape and then bonded to a plastic substrate material by injection cladding techniques. This is explained in the Abstract of the Spain patent. In contrast, Saeki as referenced at column 7, line 43 to column 8, line 6, relates to traditional painting. Saeki discloses automobile bumpers made special resin composition that has an paintability. Saeki also discloses undercoating the primer to the surface of the bumper made from the resin composition and painting the bumper. See column 7, line 58 and column 8, line 6. Saeki does not suggest that the paintability of the bumper can be improved in any other way except when using component (E) in the invention of Saeki.

Therefore, Appellants submit that there is no motivation for one of ordinary skill in the art to combine the cited references since there is no clear advantage or improvement to be gained from the combination. There is no suggestion to use a so-called size coat from Saeki on the laminate in Spain, particularly since the invention in Spain already has a size coat and a laminate with excellent paintability, durability and appearance. Spain does not even contemplate using a resin layer containing (A) a propylene-ethylene block copolymer, (B) a propylene homopolymer, (C) a specific ethylene-propylene copolymer rubber and/or an ethylene-propylene-diene copolymer rubber, (D) talc, and (E) a specific polyhydroxy polyolefin. Saeki does not suggest an advantage to be had from using the resinous composition of Spain.

In the paragraph bridging columns 16-17 of the patent, Spain provides the following teachings regarding a backing sheet:

 The backing sheet is preferably a semirigid, selfsupporting, thin, flat sheet of a synthetic resinous material;

- The backing sheet is made from a material which is compatible with an injection-molded plastic material later used to form the structural substrate base of the finished article;
- Preferably, the backing sheet is made from the same or substantially the same polymeric material as the substrate base of the finished article;
- "The material from which the substrate is molded can contain a substantial amount of filler and therefore can produce an imperfect surface on an article molded from the substrate material." (column 17, lines 7-10);
 and
- The laminate 70 is adhered to the otherwise imperfect surface of the molded substrate to improve the surface characteristics of the substrate panel and produce an outstandingly smooth controlled exterior automotive finish.

The Spain reference thus teaches that incorporation of filler into a substrate causes the substrate to have an imperfect surface. This clearly suggest that incorporation of filler into a backing sheet makes the backing sheet imperfect and consequently deteriorates the appearance. Since appearance is a very important feature for a decorative laminate, the Spain

disclosure teaches away from the incorporation of filler into a backing sheet.

It is axiomatic that is a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is not suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

To utilize the Saeki composition with filler to modify the backing sheet of Spain involves incorporation of filler into the backing sheet - in direct contradiction to the teachings of the Spain reference! For this reason, Applicants respectfully maintain that is would not have been obvious to a person of ordinary skill in the art to utilize the Saeki et al. compositions for making the backing sheet of Spain et al.

As such, Appellants submit that there is no motivation to combine the cited references.

2. Combination Does Not Achieve the Present Invention

Applicants submit that if one of ordinary skill in the art were motivated to combine the disclosure of Saeki with the disclosure of Spain, one would be motivated to use a resin composition that is not equivalent to the resin layer (B) of the present invention. The composition in Saeki, the secondary reference, that the Examiner contends is combinable with Spain,

comprises (A) a propylene-ethylene block copolymer, (B) a propylene homopolymer, (C) a specific ethylene-propylene copolymer rubber and/or an ethylene-propylene-diene copolymer rubber, (D) talc, and (E) a specific polyhydroxy polyolefin. The resin layer (B) of the present invention merely contains propylene polymer, inorganic filler and thermoplastic elastomer. There is no olefinic component in layer (B). Yet, the present invention is able to achieve the excellent properties, such as paintability and durability of the paint appearance. However, in Saeki component (E), the polyhydroxy polyolefin, is used for improving the coating adhesion for excellent paintability. Clearly, the resin layer (B) of the present invention and the resin composition of Saeki are not equivalent.

As such, Appellants submit that even if one of ordinary skill in the art were motivated to combine the cited references, then one would be motivated to use the composition from Saeki that contains components (A)-(E) listed above. Appellants submit that if it is found that there is some motivation to combine Spain and Saeki, then the composition of Saeki, which contains component (E) the polyhydroxy polyolefin would also necessarily be used in the composition - particularly since the laminate in Spain has a size coat on the paint coat and component (E) from Saeki would actually improve the desired adhesion in Spain. Clearly, there is no motivation to use the

resin composition of Saeki with Spain without also using component (E), particularly since the objective is to provide good adhesion for the paint laminate.

This being the case, Appellants submit that a reasonable combination of Spain and Saeki does not result in the present invention. In the resin layer (B) of the present invention no polyhydroxy polyolefin (component E of Saeki) is present as a component. The present invention has a good adhesive property without the presence of polyolefin resin. Therefore, the structure of the present invention is also able to maintain a good appearance for a long period of time. See page 20, first paragraph in the specification. The present invention also has good superior transparency and a superior surface gloss. See page 20, second paragraph.

Moreover, Appellants submit that there is no teaching of the specific layer B-substrate combination as recited in the present invention. The dry composite paint coating in Spain comprises a clear coat, which may contain an acrylic resin and a color coat, which may also contain an acrylic resin. This dry composite paint coating is transferred to a backing sheet. See figure 7 of Spain. Spain also discloses in Figure 12 a finished article comprising a clear coat, a color coat, a size coat, a backing sheet and a substrate. The plastic substrate material 24 can also contain filler material.

Spain discloses the materials for forming the backing sheet and the structure of the backing sheet at column 16, line 55 to column 17, line 39. Appellants submit that no inorganic filler is included in the backing sheet. The backing sheet in Spain is made from the same or substantially the same polymeric material as the substrate base of the finished article. Spain does not teach the incorporation of inorganic filler in the backing sheet.

Appellants submit that even if the polymeric material used for making the substrate contained inorganic filler in the Spain invention, this still does not teach or suggest incorporating inorganic filler in the backing sheet of Saeki because the inorganic filler is not a polymeric material. As such, Appellants submit that the presently claimed resin layer (B)/substrate combination is neither disclosed nor suggested by the combination of cited references.

3. No Suggestion to Make the Necessary Modifications

As stated above in section 2, the combination of Spain and Saiki '804 fails to disclose or suggest all of the elements of the present invention. In order to arrive at the present invention from the combination of the disclosures, one of ordinary skill in the art would have to greatly modify the disclosures of Spain and Saeki.

One modification necessary to arrive at the present invention from the combination of Spain and Saeki is that the resin composition of Saeki would not contain the polyhydroxy polyolefin. Yet Saeki discloses automobile bumpers made of a special resin composition that has an excellent paintability, and Saeki suggests achieving this property by incorporation of component (E) polyhydroxy polyolefin. Saeki does not suggest that the paintability of the bumper can be improved when component (E) is not used. Thus, to modify Saeki to meet the limitations of the present invention would go against the very objective of Saeki. Thus, there is no motivation to make this necessary modification.

Another necessary modification would be to alter the backing sheet and substrate of Spain. The backing sheet disclosed in Spain does not include inorganic fillers. There is no suggestion for Spain to include inorganic fillers in the backing sheet. As such, Appellants submit that there is no motivation to make this necessary modification to arrive at the present invention.

B. OBVIOUS TO TRY

At best the Examiner has pointed out a combination of references that make it "obvious to try" to attain the claimed invention. "Obvious to try" is not the standard under which to

reject claims under 35 USC 103. See *In re Dow Chemical Co.*, 5 USPQ2d 1521, 1532 (Fed. Cir. 1988) (rejecting the obviousness to try standard).

Appellants submit that the Examiner is using impermissible hindsight to reconstruct the instant invention. The Examiner merely relies on Appellants' own teachings to form the obviousness rejection. The Examiner has taken the instant invention and divided it into parts. The Examiner has found modified versions of each part in a separate reference. The Examiner is attempting to combine these references to arrive at the present invention. However, neither reference suggests combining the two to arrive at the instant invention. Such hindsight reconstruction is impermissible according to MPEP 2141 and In re Deminski, 796 F.2d 436, 443 230 USPQ 313, 316 (Fed. Cir. 1986).

Conclusion

For the foregoing reasons, Appellants respectfully request that the rejection finally rejecting claims 1-19 as obvious over Spain in view of Saeki be reversed by the honorable Board of Patent Appeals and Interferences of the United States Patent and Trademark Office and that the claims be allowed to issue in a United States Patent.

Should there be any outstanding matters that need to be resolved in the present application, by either the Examiner or the honorable board, please contact Richard Gallagher (Reg. No. 28,781) at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Βv

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(viii) Claims Appendix

- 1. (Previously Presented) A laminated film comprising:
- (i) a resin layer (A) containing an acrylic resin, and
- (ii) a resin layer (B) containing a resin composition,
 which composition comprises:
 - (a) 10 to 98% by weight of a propylene polymer,
 - (b) 1 to 60% by weight of an inorganic filler, and
- (c) 1 to 60% by weight of a thermoplastic elastomer, provided that the sum of the components (a), (b) and (c) is 100% by weight.
- 2. (Original) The laminated film according to Claim 1, wherein the resin layer (A) contains a transparent layer or a colored layer.
- 3. (Previously Presented) The laminated film according to Claim 1, wherein the resin layer (A) contains a transparent layer and a colored layer, wherein the transparent layer is an outermost layer.
- 4. (Original) The laminated film according to Claim 1, wherein the thermoplastic elastomer contains an ethylene- α -olefin copolymer.

- 5. (Original) The laminated film according to Claim 1, wherein the inorganic filler contains talc.
 - 6. (Original) A structure comprising:
 - (I) a laminated film, which comprises:
- (i) a resin layer (A) containing an acrylic resin, and
- (ii) a resin layer (B) containing a resin composition,
 which composition comprises:
 - (a) 10 to 98% by weight of a propylene polymer,
- (b) 1 to 60% by weight of an inorganic filler, and
- (c) 1 to 60% by weight of a thermoplastic elastomer,

provided that the sum of the components (a), (b) and (c) is 100% by weight; and

- (II) a substrate containing a polyolefin resin, wherein the substrate is bound to the resin layer (B) of the laminated film.
- 7. (Original) The structure according to Claim 6 , wherein the polyolefin resin contains a propylene polymer.

8. (Original) A process for producing a structure, which comprises the steps of

- (1) thermoforming a laminated film comprising:
- (i) a resin layer (A) containing an acrylic resin, and
- (ii) a resin layer (B) containing a resin composition,
 which composition comprises:
 - (a) 10 to 98% by weight of a propylene polymer,
 - (b) 1 to 60% by weight of an inorganic filler, and
- (c) 1 to 60% by weight of a thermoplastic elastomer,

provided that the sum of the components (a), (b) and (c) is 100% by weight, to obtain a molded laminated film having a form adapted to the form of an injection mold of the following step (2),

- (2) fixing the molded laminated film closely on an inner surface of a cavity of the injection mold so as to contact the resin layer (A) of the molded laminated film with the inner surface of the cavity, and
- (3) injecting a polyolefin resin into the mold to form a substrate, whereby obtaining a structure wherein the resin layer(B) side of the laminated film is bound to the substrate.

- 9. (Original) Car exterior or interior parts composed of the structure according to Claim 6.
- 10. (Original) Household electric appliance parts composed of the structure according to Claim 6.
- 11. (Previously Presented) The laminated film according to Claim 1, wherein the resin layer (A) has a thickness of from 30 to $700\mu m$.
- 12. (Previously Presented) The laminated film according to Claim 3, wherein the transparent layer has a thickness of from 10 to 300 μ m and the colored layer has a thickness of from 20 to 400 μ m.
- 13. (Previously Presented) The laminated film according to Claim 1, wherein the resin composition contains 20 to 70% by weight of the propylene polymer.
- 14. (Previously Presented) The laminated film according to Claim 1, wherein the resin composition contains 10 to 50% by weight of the inorganic filler.

- 15. (Previously Presented) The laminated film according to Claim 1, wherein the resin composition contains 10 to 50% by weight of the thermoplastic elastomer.
- 16. (Previously Presented) The process according to Claim 8, wherein the resin layer (A) has a thickness of from 30 to 700 μm .
- 17. (Previously Presented) The process according to Claim 8, wherein the resin composition contains 20 to 70% by weight of the propylene polymer.
- 18. (Previously Presented) The process according to Claim 8, wherein the resin composition contains 10 to 50% by weight of the inorganic filler.
- 19. (Previously Presented) The process according to Claim 8, wherein the resin composition contains 10 to 50% by weight of the thermoplastic elastomer.

(ix) Evidence Appendix

No evidence is submitted herewith.

(x) Related Proceedings Appendix

There are no related proceedings.